

Louisiana Department of Environmental Quality

Information Services Division

Technology Innovation Fund Proposal

For

Interactive Real-time Vehicle Emission and Safety  
Testing

*Through continually improving compliance with state and federal laws and regulations, LDEQ provides comprehensive environmental protection services to the people of Louisiana.*

February 2002

**I PROJECT TITLE – Interactive Real-time Vehicle Emission and Safety Testing.**

**II PROJECT LEADER**

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**III EXECUTIVE SUMMARY**

The Department of Environmental Quality (LDEQ) in partnership with the Department of Public Safety (LDPS) is submitting this request for a project intended to provide interactive real-time vehicle emission and safety testing for the Greater Baton Rouge area including the following parishes: Ascension, East Baton Rouge, Livingston, Iberville, and West Baton Rouge.

The proposed project will maximize efficiency of department personnel by eliminating the need to optically scan and decipher hand entered inspection documents that are forwarded weekly from the vehicle inspection stations and allow more time for monitoring of compliance. This project is in keeping with the LDEQ department's mission of providing comprehensive environmental protection services and will help attain department goals by taking steps to improve air quality in the five-parish area. It will aid the LDPS department goals by ensuring that safer vehicles are on the road. These goals are accomplished by requiring vehicles that fail the inspection to be repaired or removed from operation.

With the new interactive system, the full details of the inspection including the pass/fail status of a vehicle will be immediately transmitted to the LDEQ vehicle inspection system (VIS) instead of being submitted weekly in hard copy code sheet format. The accuracy and timeliness of the emissions data will be enhanced through the utilization of the new interactive system. This system will capture all inspection details, resulting in user error reduction and eliminating willful data tampering.

By allowing LDEQ and LDPS personnel to streamline their jobs and improve the operation and monitoring of the vehicle inspection program, this project will improve the timeliness of vehicle inspection tasks, lower operating costs and improve quality of service to the public and to the inspection stations.

Communication between the inspection stations, LDEQ and LDPS field inspectors and the central database will be via wired and/or wireless communication links using standard communication protocols. Vehicle testing equipment will be directly linked to the data collection software application for real-time communication with the LDEQ VIS.

This project is expected to be fully operational in the five-parish ozone non-attainment area by the end of 2002 and is projected to cost \$700,040.

## **IV DESCRIPTION OF THE PROJECT**

### **A. Project Narrative**

In response to statutory requirements of the federal Clean Air Act Amendments of 1990 and to avoid sanctions from the EPA, the Louisiana Legislature (by Act 576 of the 1999 Regular Session) authorized a vehicle inspection/maintenance (I/M) program for the control and abatement of motor vehicle emissions for the five-parish Baton Rouge ozone non-attainment area. The five ozone non-attainment parishes include Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge. The emissions tests include a gas cap pressure test that was implemented effective January 1, 2000 and an On-Board Diagnostic (OBD) test to be implemented in 2002. (Note: The OBD test requirement will replace the requirement for a fuel inlet pressure test which was not implemented due to the lack of suitable equipment to perform the test). The emissions tests are performed by certified inspection stations in the non-attainment area in conjunction with safety inspections. The enforcement of program provisions and collection of fees for the I/M program is governed by the Department of Public Safety and Corrections, Office of State Police, Safety Enforcement Section, with DEQ providing oversight, data collection support, and liaison activities. To compensate for the additional work and equipment required in performing the emission tests, motorists in the five parish ozone non-attainment area are required to pay \$3 in addition to the \$10 charged for the safety inspection for a total of \$13/inspection. This rule applies to vehicles registered within the five parishes which are gasoline powered, light duty cars and trucks up to 10,000 pounds GVWR (gross vehicle weight rating). Subject vehicles model year 1980 and newer receive a visual anti-tampering inspection and a gas cap test and in addition, subject vehicles 1996 and newer are scheduled to begin receiving an OBD test in 2002.

Implementation of this project will improve the agency's ability to identify vehicles deficient in meeting established safety and emissions standards. Owners of these vehicles will be required to correct identified deficiencies before receiving a valid inspection sticker. The corrected deficiencies are estimated to assist in moving the five-parish area toward National Ambient Air Quality Standards (NAAQS) attainment status and having safer vehicles on the road.

During analysis of the real-time data reporting requirements for OBD testing that is to be implemented this year, it was determined that the entire vehicle inspection process should be examined and improved. At that time the project goals were defined as follows:

- ?? Take steps to improve air quality (reducing ozone precursors like VOC and NOx) through testing vehicles in the five-parish ozone non-attainment area.
- ?? Implement the new OBD testing requirements.
- ?? Improve vehicle inspection reporting.
- ?? Improve vehicle inspection monitoring.
- ?? Reduce or eliminate paper reporting.
- ?? Reduce the burden on vehicles inspectors, LDEQ and LDPS.
- ?? Reduce vehicle inspection test time.
- ?? Eliminate need for additional LDEQ manpower through a more efficient program.
- ?? Improve accuracy and timeliness of data received from the testing stations.
- ?? Improve accountability to ensure consumer is getting services paid for.
- ?? Centralize data collection and reporting.

The proposed project is essential to the effective control and abatement of motor vehicle emissions in the five-parish ozone non-attainment area. This will assist the state in meeting the statutory requirements of the federal Clean Air Act Amendments of 1990 and avoid EPA sanctions as well as improve the current delivery of vehicle inspection services to Louisiana citizens. It will also reduce the reporting burden, reduce paper work, reduce paper waste and take steps to improve air quality in the five-parish area.

Completion of this project will provide:

- ?? Improved service to the public by improving the entire vehicle inspection process.
- ?? Elimination of data entry and/or scanning of paper forms by LDEQ.

- ?? Collection and communication of vehicle inspection data on a real-time basis thereby providing immediate feedback and verification of the vehicle identification information as well as other inspection data.
- ?? Improved quality of inspection data by reducing the amount of information that must be entered manually by the vehicle inspector.
- ?? An automated method for updating the inspection software when necessary such as for compliance with new inspection requirements.
- ?? Improved electronic communication ability between LDEQ, LDPS and the inspection station personnel.
- ?? Improved data analysis and reporting capability to meet agency requirements.
- ?? Web-based data access to LDEQ and LDPS agency personnel responsible for monitoring and administering the inspection program.
- ?? Web-based data access to EPA personnel for monitoring compliance with federally mandated requirements in the inspection program.
- ?? Web-based access to the public to assist in locating state authorized vehicle inspection stations.
- ?? Web-based reporting on the inspection data for the five-parish non-attainment area.

The project includes approximately 200 vehicle stations in the five-parish area, LDPS and LDEQ personnel and implements a base network to allow electronic communications with the LDEQ and LDPS computer systems. There are approximately 400,000 vehicles in this area subject to the inspection program. Time to inspect a vehicle should be reduced because of minimal data entry requirements of the new system allowing Louisiana citizens to receive services in a timelier manner. Vehicle inspectors will use the system to speed up and improve vehicle testing, streamline vehicle test reporting to LDPS and LDEQ and reduce the possibility of data entry errors. State personnel will use the system to ensure compliance with testing requirements, monitor test results and trends and for state and federal reporting. This will also allow existing state personnel to spend more time on actual monitoring of the program and less time doing manual tasks such as data entry of inspection results.

Future expansion of the program to include all safety inspections statewide will be considered at the end of the project. Expansion of the emission testing may be required if new parishes come under the non-attainment ruling.

Communication between the inspection stations, LDEQ and LDPS field inspectors and the central database will be via wired and/or wireless communication links using standard communication protocols. Vehicle testing equipment will be directly linked to the data collection software application for real-time communication with the central collection and tracking system at LDEQ hereafter referred to as the LDEQ Vehicle Inspection System (VIS). The LDEQ VIS will be linked real-time via frame relay to the Vehicle Identification Database (VID) at the LDPS computer center for verification of the vehicle identification number (VIN) during a vehicle inspection. The VIN information will be entered via a scanner to eliminate entry errors. After connecting to the LDPS VID, information will be returned to the inspection site concerning type and make of vehicle to ensure that the VIN matches the vehicle being inspected.

The LDEQ and LDPS field inspectors will be able to immediately test accuracy of equipment and communicate those findings to the LDEQ VIS. Security in the system will allow only authorized inspectors to perform inspections at specific authorized stations. Only properly registered LDEQ and LDPS personnel will be able to access and monitor compliance of the stations.

There are many benefits to the system. The public will be better served by receiving timelier vehicle inspections and by receiving a written report of OBD computer analysis results at the time of inspection. By communicating on a real-time basis, the state will have better assurance that the right vehicles are being tested. The VIN number will be checked against the LDPS VID and return information on the correct vehicle for that VIN. This system will also prevent potential cheating because it will be almost impossible to give out inspection stickers without testing vehicles or to enter invalid emission test results.

Louisiana citizens, the state and vehicle inspectors will be better served after implementation of this project, which will reduce paper waste, improve timeliness and accuracy of inspections and reporting and help take steps to improve air quality in the area.

## **B. Use of Innovative Technology**

What makes this system so innovative is that proven technology allows LDEQ and LDPS to overcome many traditional barriers to an effective vehicle inspection program such as slow inspections as a result of manually entering test results, slow communication and information dissemination, time-consuming data scanning and processing and inaccurate/incomplete reporting by the inspection stations. It also allows the agencies to more efficiently and accurately meet federal reporting requirements.

Seven other states have implemented OBD testing programs to meet the EPA guidelines for improving air quality. Louisiana is similar but not exactly like these states in that Louisiana does not perform tailpipe emission testing and therefore doesn't have an existing analyzer at the vehicle inspection stations that can be upgraded to include OBD testing. Of the seven other states, only five are currently doing real-time data collection as Louisiana is proposing to do.

By employing more efficient communication methods, success of the vehicle inspection program will be improved. An improved inspection program provides better quality and more timely inspections to the public. LDEQ and LDPS field agents will be able to more efficiently perform test checks and reporting will be immediate instead of paper based as done currently. Paper use will be almost eliminated with on-line access and result in a cost savings to Louisiana citizens.

Due to immediate access and sign-on requirements, only authorized inspectors and LDEQ and LDPS personnel may access the system. This will ensure data quality and improve reporting accuracy.

## **C. Multi-agency Application or Portability to Other Agencies**

LDEQ provides oversight for the vehicle inspection program while LDPS carries out the enforcement functions. Both agencies work together to secure and ascertain data in preparing reports for EPA. Both agencies have a good working knowledge of each other so there is less time resolving issues that involve both agencies (i.e. joint audits, roadside audits, and preparing reports). This proposed project would allow data from joint audits and roadside audits to be entered immediately into the LDEQ system just as it is for the inspection stations thus reducing paperwork for the auditors.

This project will enable LDEQ and LDPS to improve collaboration by providing a means for the agency database systems to communicate directly and on a real-time basis for verification of the vehicle identification number and to immediately report results of the emission inspection per requirements of the EPA guidelines. Authorized LDEQ and LDPS personnel will have immediate access to all inspection data collected and stored at the LDEQ VIS. Timeliness and accuracy of reporting will be improved. Authorized EPA personnel will have access to the emission data for the five-parish ozone non-attainment data via the web.

#### **D. Benchmarking Partners and/or Best Practice References**

Other states successfully implementing a project of this type are listed below. Alaska and Utah are the only decentralized states that currently include real-time data collection. Cost at the different states can vary from \$16.50 to \$70.00 per test, which includes both emission and safety tests. Costs in some states are as high as \$35.00 for only the emission tests. Louisiana is proposing to implement a real-time interactive system. The cost to the public per test, including safety and emission testing, will remain at \$13.00 per test in the five-parish ozone non-attainment area. Information provided was gathered via a phone survey.

##### **States Doing On-Board Diagnostics Testing**

###### **Centralized programs:**

States with centralized programs typically use I/M 240 units costing from \$16,000 - \$45,000 for each set up. The hardware/software for running OBD for these units is usually different from the stand-alone units that we are proposing to use.

###### **Oregon's Vehicle Inspection Program**

- |   |                              |
|---|------------------------------|
| - Contact: Jerry Kofer (503) 731-3050   | \$21 (emission only)         |
| - Centralized program                   | Using ESP as Contractor      |
| - Started mandatory OBD testing in 2001 | and Vetronix Hardware        |
|   | Software by Vetronix and ESP |

###### **Wisconsin's Vehicle Emission Inspection**

- |   |                          |
|---|--------------------------|
| - Contact: Chuck Rhodes (414) 266-1084    |                          |
| - Centralized program                     | Hardware: Vetronix, EASE |
| - Started mandatory OBD testing July 1999 | Software: Envirotest     |

###### **Indiana's Clean Air Car Check**

- |  |                                      |
|--|--------------------------------------|
| - Contact: Mike Worrell (317) 232-8218       | Avg. \$35/test (state picks up cost) |
| - Centralized program                        | Hardware: Vetronix                   |
| - Started mandatory OBD testing January 2002 | Software: Vetronix, Envirotest       |

###### **Decentralized programs:**

States in this section can be either stand-alone or have centralized set-ups at many different locations. Louisiana is proposing a decentralized program with use of stand-alone types.

###### **Maine's Enhanced Auto Inspection**

- |  |                                |
|--|--------------------------------|
| - Contact: Scott Wilson (207) 287-8442           | \$16.50 (safety and emissions) |
| - Decentralized program—no tailpipe testing      | Hardware: Open Market          |
| - Advisory only during 2000 -Jan.2001? mandatory | No Software:                   |
|  | No real-time data collection   |

###### **Vermont's Motor Vehicle Inspection Program**

- |   |                                |
|---|--------------------------------|
| - Contact: Tom Moye (802) 241-3819                | \$20-40 (safety and emissions) |
| - Decentralized program—no tailpipe testing       | Hardware: Open Market          |
| - Advisory only during 2000 -Jan.2001 ? mandatory | No Software: No real-time      |

###### **Utah's Vehicle Inspection/Maintenance Program**

- |   |                         |
|---|-------------------------|
| - Contact: Joe Thomas (801) 626-7836      | No Answer/Olympic Break |
| - Decentralized program                   |                         |
| - Started different dates for each county |                         |

###### **Alaska's Emission Testing**

- |   |                                |
|---|--------------------------------|
| - Contact: Mary Parker (907) 269-7695 or Rachel Cunningham (907) 269-7698 | \$50-70 (safety and emissions) |
| - Decentralized program   | Hardware/Software: Worldwide   |
| - Started mandatory OBD testing September 1, 2001                         |                                |

## **E. Long-range Planning**

According to LDEQ's Strategic Plan for fiscal years 2001 – 2006, the department's mission is to provide service to the people of Louisiana through comprehensive environmental protection in order to promote and protect health, safety and welfare while considering sound policies regarding employment and economic development.

To accomplish this mission the department is an assertive proponent of a clean and healthy environment, accomplishing its mission through regulatory and non-regulatory means to achieve a balance that sacrifices neither economic growth nor environmental protection. Decisions made by the department will be open, fair, consistent and based on comprehensive scientific information applied in accordance with law. The department encourages stakeholder and public participation; emphasizes and supports innovative and effective programs; promotes environmental awareness; and supports enhanced customer service, outreach and small business assistance. Additionally, the philosophy of the Environmental Planning Division is to apply the best science and technology to define environmental problems and to apply effective regulatory and remediation solutions in a fair, honest and consistent manner.

According to the department's strategic plan, LDEQ's goals are: to protect public safety, health and welfare by protecting and improving the environment; increase compliance with environmental laws that meet state and federal mandates; operate in an efficient and effective manner; to the extent possible, conduct programs that are consistent with sound policy for employment and economic development; enhance customer service; provide regulatory flexibility; and improve the state of environmental protection through effective planning, evaluation and monitoring of the environment.

Because of the interdependency between LDEQ and DPS in this project, the Environmental Planning Division believes that the implementation of the technical Inspection/Maintenance program will directly assist the department in accomplishing specific aspects of its long-range goals. The capabilities of this system will immediately identify specific vehicle sources of detrimental emissions while also providing motivation for the citizen to do his part in order to obtain the necessary inspection sticker.

The citizens of Louisiana expect efficient and accountable government services for their tax dollars. This system is cost-effective and presents no financial risk. LDEQ and LDPS will use this system to assist in accomplishing the department goals.

## **F. Performance Goals**

Strategic (Long range):

Review 95% of the environmental data for air to define environmental problems and facilitate planning activities to develop regulatory and pollution control strategies to meet time schedules and requirements of the Clean Air Act.

Operational (1 year):

To ensure that 59 parishes continue to meet the National Ambient Air Quality Standards for six (6) criteria pollutants and to work toward bringing the remaining five (5) parishes into compliance by FY 2003-2004.

Input: Number of subject vehicles to inspect 400000

Output: Number of subject vehicles inspected 380000

Outcome: Compliance rate of subject vehicles inspected 95%

## **G. Technical Approach**

A Request for Proposal (RFP) has been published for the development, installation, supply and maintenance of a Vehicle Inspection System (VIS). The expected deliverables from the RFP are as follows:

- ?? A Vehicle Inspection System (VIS) with all applications necessary to administer and report on the database. This system will store information concerning the vehicle inspection program and communicate with test equipment in the vehicle inspection program in real-time and with a motor vehicle registration database and with associated applications necessary for the successful implementation of the system.
- ?? Specifications for the vehicle test equipment to be purchased by the inspection stations and by LDEQ for LDEQ auditors and LDEQ program inspectors.
- ?? Specifications for the Vehicle Inspection Network (VI Network) to be used in communications between the test equipment and the VIS to be acquired by the inspection stations and by LDEQ.
- ?? Software for the inspection equipment to be acquired by the inspection stations and by LDEQ for test equipment purchased by LDEQ.

In addition, the VIS must be EPA compliant as per 40 CFR Parts 51 and 85: Amendments to Vehicle Inspection Maintenance Programs Requirements Incorporating the Onboard Diagnostic Check; Final Rule, effective May 7, 2001 and EPA420-R-01-015: Performing Onboard Diagnostic System Checks as Part of a Vehicle inspection and Maintenance Program: Draft Guidance, dated June 2001 and must include safety inspection components as required by the Department of Public Safety inspection program.

As part of the project, product specifications will be provided for the necessary test equipment, including all peripherals, required for successful testing by the inspection stations. This equipment will be capable of collecting/recording the necessary test information from the vehicle inspection, accessing necessary validation information from the VIS in real-time and transferring the inspection results to the VIS. The peripherals specified will include equipment capable of performing the OBD testing, gas cap testing, magnetic stripe reading, bar code scanning, and all interface cables, etc. needed for connecting the test equipment to a computerized tester. This connection will be done in such a manner that does not require the inspector to disconnect and re-connect cables for each test. Equipment specified will allow for an open market where possible.

1. *Technical description.* The system will be an N-Tiered Thin-Client application with Peer-to-Peer extensions. There will be two-way interactive communication between the client and the LDEQ VIS using standard TCP/IP and HTTPS connections. The testing equipment will be connected to the system through standard RS232 serial connections. Connections between the LDEQ VIS and LDPS VID will be via frame relay.



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2. *Interoperability.* The LDEQ VIS system and network will be developed using industry standard communication protocols, email and data exchange methods and will work with other networks and systems as appropriate.
3. *Scalability.* Additional stations, inspectors and state personnel may be added as needed by changing information in the LDEQ VIS via web based forms. The only requirement for the station or stations being added would be to purchase the testing equipment, software and access to the network.
4. *Maintaining the System.* Technical and User Documentation will be provided by the vendor as well as training in the administration and support of the system. Existing LDEQ I/S personnel will be responsible for maintaining the system after completion of the pilot and successful acceptance of testing. LDEQ and LDPS inspection personnel will be trained on the user part of the system and will be responsible for training the inspectors at the stations on use of the system.

#### **H. Implementation Approach**

Implementation of the project will proceed according to a mutually agreed upon project schedule between LDEQ, LDPS and the selected vendor. There will be a phased approach, with a pilot program consisting of at least ten (10) participating inspection stations. Full implementation will proceed at the successful completion of the pilot and acceptance testing.

The inspection stations are responsible for purchasing equipment necessary to perform the emission testing and software and hardware required to access the new VIS and communication network. The price of this equipment is not to exceed \$1700 according to rules formulated by LDEQ. This money will come from the additional fees that have been collected by the inspectors in anticipation of the new testing requirements. LDEQ will purchase the equipment for its inspection auditors and field agents. Specification for the equipment and network are deliverables of the RFP.

## **I. Assessment of Risks**

A risk assessment concludes no inherent limitations exist for this project. LDEQ's mission to provide comprehensive environmental protection in order to promote and protect health, safety and welfare has remained constant since the department's creation and will remain the same well into the future; LDEQ's goals and objectives may change slightly to adapt to a changing world with changing needs, but these goals and objectives will always address protection of the environment and people. Likewise, numerous division objectives may change in terms of programs and the state's environmental needs, but all divisions will always share the department's mission.

Administrations change; laws are amended; programs are added, deleted and altered; new methods and operations are applied; staffing changes. Even as external and internal changes occur, the need for environmental protection and safety will always exist. LDEQ and LDPS recognize the need for an effective vehicle emission and safety program.

The adaptability, simplicity and flexibility of the LDEQ VIS are the system's greatest assets and are assurances that all monies committed to this system make good business sense. The proposed system's software will change to meet on-going needs and will allow for the addition of new inspection stations, inspectors and state personnel as needed. Possible future expansion should be relatively simple.

The proposed system does not require additional personnel and it allows for a more efficient use of time. The need for vehicle emissions monitoring will continue even after attainment has been reached. Other parishes may be added to the ozone non-attainment area and will require addition of emission monitoring in those newly added areas. The system can continue to be used for safety inspections even in the unlikely event the requirement for emission testing is eliminated.

## **J. Integration with Existing Technologies**

This proposal will make use of existing network and firewall equipment and software currently in use at LDEQ and LDPS using standard communication protocols already in place. The system will communicate and store information on a server, provided by LDEQ, using standard operating systems and software currently supported by LDEQ.

## K. Project Budget and Costs

### 1. Equipment.

<b>EQUIPMENT</b>			
<u>Personal Computer:</u> Four (4) personal computers will be provided to LDEQ (2) and LDPS (2) for access to the testing equipment, software and network. Each computer will be equipped with a modem and 4-port serial card and will cost \$1,500.			
<u>Testing equipment as specified by vendor:</u> The equipment will include a generic parallel printer and cables to connect the test equipment. Cost: \$1,485.			
Cost Summary:			
<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Personal Computers	4	\$ 1,500	\$ 6,000
Generic parallel printer	4	\$ 100	\$ 400
Parallel Cable for printer	4	\$ 20	\$ 80
Generic Bar Code Reader	4	\$ 220	\$ 880
Generic Magnetic Stripe Reader	4	\$ 140	\$ 560
Waekon FPT27 Gas Cap Tester w/ RS232 Interface or equiv.	4	\$ 400	\$ 1,600
RS232 Serial Cables	16(4*4)	\$ 80 (4)	\$ 320
KAL 9600 Scann II OBDII Tester Tool	4	\$ 525	\$ 2,100
<b>Total</b>			<b>\$11,940</b>

### 2. Software

<b>SOFTWARE</b>			
<u>Inspection Testing Application Software:</u> Includes fees for software, license, installation and one-year maintenance. Four copies will be purchased for LDEQ (2) and LDPS (2). Cost: \$1400 each.			
<u>Vehicle Inspection Server Software:</u> Includes fees for software, license, installation and one-year maintenance. Cost: \$560,000.			
<u>Oracle Server License:</u> Includes fees for software license for one processor for the LDEQ VIS.			
Cost Summary:			
<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Inspection Testing Software	4	\$ 1,400	\$ 5,600
Vehicle Inspection Server Software	1	\$560,000	\$560,000
Oracle Server License	1	\$ 40,000	\$ 40,000
<b>Total</b>			<b>\$605,600</b>

### 3. Telecommunications

<b>TELECOMMUNICATIONS</b>			
<u>Leased T-1 Circuit:</u> Existing telecommunications capabilities will be used so no further purchase is needed in this area.			

4. Professional/Contracted Services

PROFESSIONAL SERVICES			
<u>System Pilot Program:</u> Professional services will be required to implement and support the proposed 10 station pilot program.			
<u>Training of LDEQ and LDPS personnel:</u> Professional services will be required for training LDEQ I/S personnel on administration of the system and for LDEQ and LDPS inspection personnel on use of the testing system.			
<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Pilot Program	1	\$57,000	\$57,000
Training	1		\$25,500
<b>Total</b>			<b>\$82,500</b>

5. Other.

OTHER COSTS
<u>None.</u>

V FUNDING REQUESTED

FUNDING REQUESTED			
<u>Funding Category</u>	<u>Total Cost</u>	<u>Other Sources</u>	<u>Funding Requested</u>
Equipment	\$ 11,940	0	\$ 11,940
Software	605,600	0	605,600
Telecommunications	N/A	N/A	N/A
Professional Services	82,500	0	82,500
Other	N/A	N/A	N/A
<b>Total</b>	<b>\$700,040</b>	<b>\$ 000</b>	<b>\$700,040</b>

## **VI COST/BENEFIT ANALYSIS**

### **FISCAL AND ECONOMIC IMPACT STATEMENT FOR ADMINISTRATIVE RULES**

#### **RULE TITLE: Motor Vehicle Inspection**

##### **I. ESTIMATED IMPLEMENTATION COSTS (SAVINGS) TO STATE OR LOCAL GOVERNMENT UNITS (Summary)**

There should be minimal costs incurred and no savings regarding the adoption of these rules. The only cost will be to state and local governmental units in the five-parish non-attainment area that inspect their own vehicles, as they will have to purchase the testing equipment required by these rules at an estimated cost of \$1,700.

##### **II. ESTIMATED EFFECT ON REVENUE COLLECTIONS OF STATE OR LOCAL GOVERNMENTAL UNITS (Summary)**

There should be no effect on revenue collections of state or local governmental units.

##### **III. ESTIMATED COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NONGOVERNMENTAL GROUPS (Summary)**

The only cost will be to inspection stations in the five parish non-attainment area who will pay an estimated \$1,700 to purchase the equipment required by these rules as well as possibly having to purchase a computer, printer, monitor, and Internet access if the station does not already have such. In addition, there may be possible ancillary costs for maintenance and upgrades of this equipment. Benefits to the affected stations include less paperwork, reduction in time required to perform an inspection, and less postage costs.

##### **IV. ESTIMATED EFFECT ON COMPETITION AND EMPLOYMENT (Summary)**

The cost of the testing equipment by these rules may result in some inspection stations finding it cost prohibitive to remain in the Motor Vehicle Inspection program.

Jill P. Boudreaux H. Gordon Monk  
Deputy Undersecretary Staff Director  
0109#031 Legislative Fiscal Office

Implementation of this project helps LDEQ to avoid EPA sanctions, reduces the need for additional LDEQ personnel to administer the program and includes the ability to expand with minimal cost and effort.

It will help LDEQ in achieving cleaner air through taking steps to reduce emissions from motor vehicles of ozone forming pollutants.

EPA requires that an enhanced vehicle inspection/maintenance (I/M) program be implemented in the Baton Rouge Ozone non-attainment area (parishes of Ascension, East Baton Rouge, Livingston, Iberville, and West Baton Rouge), which is classified as serious.

The enhanced vehicle I/M program is prescribed in Section 182(c) of the Clean Air Act Amendments for serious non-attainment areas.

The I/M program has been partially implemented (gas cap testing) since January 2000. The program was to be fully implemented adding On-Board Diagnostics testing by January 1, 2002 as per DPS rule and Governor's commitment to EPA in a revision to the State Implementation Plan submitted December 31, 2001. This date has passed and the State must now move expeditiously to implement as soon as possible. The I/M program will be required as part of the required maintenance plan for the area after Baton Rouge reaches attainment.

**Consequences:**

EPA is beginning review of the attainment plan for Baton Rouge and has committed to final approval of the attainment plan by the end of December 2002. However, in order for this commitment to be met by EPA, the state must complete implementation of the I/M program in the Baton Rouge area and submit a network effectiveness demonstration to EPA by September 15, 2002, which is based on a minimum of two months of test data collected from the operation of the full network of test stations.

If EPA cannot approve the I/M program due to further delays in implementation of OBD and submittal of a network effectiveness demo, then EPA cannot move forward with approval of the attainment plan because all CAA requirements for the "serious" classification must be fully met and I/M is one of those requirements.

Failure to get the attainment plan approved will result in a "bump-up" of the area to the "severe" classification, which has additional requirements prescribed by the CAA including but not limited to the following:

1. The mandatory use of more costly reformulated gasoline in the Baton Rouge non-attainment area;
2. Submittal of a plan containing enforceable transportation control measures (TCM) to offset growth in vehicle miles traveled. It would be mandatory that transportation funds would have to be earmarked for TCM projects in the non-attainment area i.e. transit, restriction of lane to high occupancy vehicles, park and ride, and bike paths.
3. A higher offset ratio for new emission sources such as new industrial projects or expansion;
4. Regulation of smaller sources as major sources. This impacts sources emitting 25 tons per year or more under "severe" classifications vs. 50 tons per year currently as "serious" with requirements for emission controls, permitting and compliance reporting and recordkeeping.

**Advantages:**

- o (LDEQ)—Cleaner air – reduction in emission of ozone forming pollutants
- o Fulfill the last remaining CAA requirement for the Baton Rouge "serious ozone" non-attainment area perhaps avoiding a "bump-up" of the area to the "severe" classification with additional CAA requirements.
- o (LDEQ-LDPS) – Conversion from manual to electronic reporting of data will reduce man-hours in collection, transport, storage and recycling of forms.
- o (LDEQ/LDPS) Elimination of potential fraud in testing
- o Convenience/Consumer Choice- one-stop for safety inspection, emission inspection and possibly for repairs if needed or if consumer chooses.
- o Decentralized Network of stations offers the convenience of multiple locations perhaps near home or work
- o Electronic Testing Eliminates potential fraud related to "needed" repairs.
- o Problems covered by warranties identified potentially saving consumer money on repairs or avoiding costly repairs.
- o Safer vehicles on the road may translate in fewer accidents and breakdowns saving motorists time and reducing traffic congestion

**VII SIGNED STANDARD FORM**

\_\_\_\_\_(Signed)\_\_\_\_\_  
J. Dale Givens  
Secretary, LDEQ

Date: \_\_\_\_\_

\_\_\_\_\_(Signed)\_\_\_\_\_  
Thomas C. Bickham III  
Undersecretary, LDEQ

Date: \_\_\_\_\_

\_\_\_\_\_(Signed)\_\_\_\_\_  
Stacy Richardson  
I/T Director, LDEQ

Date: \_\_\_\_\_